

**A PRELIMINARY LIST OF CICADELLIDÆ (HOMOPTERA)
OF SOUTH CAROLINA, WITH DESCRIPTIONS
OF NEW SPECIES.**

FRANK H. LATHROP.

During the summer of 1914 the writer began the collection of Cicadellidæ or "Jassids" of South Carolina for the purpose of making a systematic study, which was submitted in 1915 to the Ohio State University as a thesis required for the master's degree. At present the work is still being prosecuted with a view of making the paper more complete and of bringing in additional material along other than purely systematic lines. It seems desirable now, however, to publish a list of species and descriptions of new forms found in the State.

All species not otherwise indicated were collected by the writer. Besides this material, the collections at hand include species secured by Professor Herbert Osborn at Columbia and Clemson College, Mr. H. C. Eagerton at Marion, Mr. G. M. Anderson at Walterboro, Mr. L. L. Ferebee at Ridgeland, and Professor G. H. Pearce at Sievern.

The nomenclature proposed by Van Duzee in his recent check list* has been used in this paper.

Subfamily BYTHOSCOPINÆ Burmeister.

Bythoscopus robustus Uhler. Orangeburg, Eutawville, St. George.

Idiocerus nervatus Van Duzee. Clemson College.

Agallia constricta Van Duzee. Clemson College, Columbia (Professor Osborn), Orangeburg, Denmark, Eutawville, Eutaw Springs, Ferguson, Marion (H. C. Eagerton), Walterboro (G. M. Anderson,) Ridgeland (L. L. Ferebee), Charleston.

Agallia novella Say. Clemson College, Orangeburg.

Agallia 4-punctata Provancher. Orangeburg.

Agallia sanguinolenta Provancher. Columbia (Professor Osborn), Orangeburg, Denmark, Eutawville, Eutaw Springs, Ferguson, Marion (H. C. Eagerton), St. George, Walterboro (G. M. Anderson), Charleston, Isle of Palms.

*Van Duzee, Edward P., Check List of the Hemiptera of America, North of Mexico, N. Y. Ent. Soc., 1916.

Agallia immaculata n. sp. (Fig. 1). Form and structure closely similar to *A. sanguinolenta* Prov. but smaller, and lacking the color markings.

The entire surface minutely granulated. Vertex nearly parallel margined, the posterior margin evenly arcuate and slightly elevated. Pronotum slightly more than twice as wide as long, faintly, transversely striated on the disc; the posterior margin with a shallow emargination. Scutellum slightly shorter than its basal width, the apex produced.

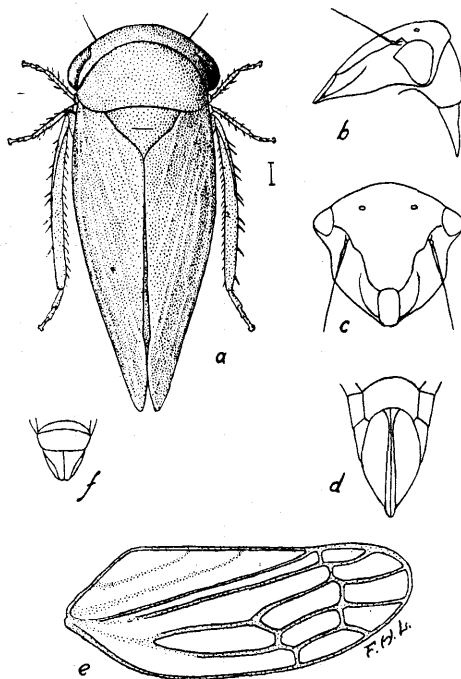


Fig. 1. AGALLIA IMMACULATA n. sp.

a, Dorsal view of female; b, Lateral view of head; c, Face; d, Female genitalia; e, Elytron; f, Male genitalia.

Elytra broad and short, the apex bluntly rounding, nervures distinct, raised. Face somewhat longer than the width on the base, the sutures depressed, the suture between the front and the clypeus obsolete. Front broad on the base, abruptly narrowing before the middle; below this the margins are straight and nearly parallel, abruptly rounding to the clypeus.

Coloration: nearly uniformly tawny, somewhat intensified on the pronotum, the humeral margins of the elytra, and the front. The ocelli red; eyes dark fuscous, irregularly margined with red. The males are darker, varying to fuscous, and in very dark specimens there may be

a pair of indistinct spots near the posterior margin of the pronotum, a pair on the disc of the vertex, which, with the frontal sutures, the antennal sockets, and indistinct arcs on the front are fuscous or blackish. The elytra sometimes fuscous with the venation a trifle lighter. Below, light fuscous, somewhat darker in the males.

Genitalia: ♂ valve short and wide, distinctly narrowed posteriorly; posterior margin truncate; plates short, broad on the base, sharply narrowing to behind the middle, then nearly parallel margined to the obtusely rounded tips. ♀ ultimate ventral segment somewhat crescentiform, the posterior margin roundly emarginate.

Length: ♂ 2.75 mm., ♀ 2.75–3 mm.

Described from twelve males and five females from Orangeburg, Denmark, St. George, Charleston and Isle of Palms.

Macropsis viridis Fitch. Clemson College.

Subfamily CICADELLINÆ Van Duzee.

Aulacizes irrorata Fabricius. Clemson College, Orangeburg, Denmark, Ferguson, Marion, (H. C. Eagerton), Walterboro (G. M. Anderson), Isle of Palms.

Oncometopia undata Fabricius. Clemson College, Orangeburg, Ferguson, Marion (H. C. Eagerton), St. George.

Oncometopia lateralis Fabricius. Clemson College, Orangeburg, Denmark, Ferguson, Marion, (H. C. Eagerton), Ridgeland (L. L. Ferebee).

Homalodisca triquetra Fabricius. Orangeburg, Ferguson, Charleston.

Cicadella occatoria Say. Orangeburg, Walterboro (G. M. Anderson), Marion (H. C. Eagerton).

Kolla bifida Say. Clemson College, Orangeburg, Eutawville, Walterboro (G. M. Anderson).

Kolla geometrica Signoret. Clemson College, Orangeburg.

Graphocephala coccinea Forst. Clemson College, Orangeburg, St. George, Walterboro (G. M. Anderson), Marion (H. C. Eagerton), Ridgeland (L. L. Ferebee).

Graphocephala versuta Say. Clemson College, Orangeburg, Ferguson, Denmark, St. George, Marion (H. C. Eagerton), Walterboro (G. M. Anderson), Charleston, Isle of Palms.

Dræculacephala mollipes Say. Orangeburg, Eutaw Springs, St. George, Walterboro (G. M. Anderson). Variety **7-guttata** Walker. Orangeburg, Walterboro (G. M. Anderson). Variety **minor** Walker. Clemson College, Orangeburg, Eutawville, Eutaw Springs, Denmark, St. George, Marion (H. C. Eagerton), Walterboro (G. M. Anderson), Ridgeland (L. L. Ferebee), Charleston.

Dræculacephala reticulata Signoret. Clemson College, Columbia (Professor Osborn), Sievern (G. H. Pearce), Orangeburg, Eutawville, Eutaw Springs, Ferguson, Denmark, St. George, Marion (H. C. Eagerton), Walterboro (G. M. Anderson), Ridgeland (L. L. Ferebee), Charleston.

Subfamily GYPONINÆ Berg.

Gypona striata Burmeister. Clemson College, Orangeburg, St. George.

Gypona octolineata Say. Silver (H. C. Eagerton).

Gypona pectoralis Spangberg. Orangeburg.

Xerophloea viridis Fabricius. Orangeburg, Ferguson, St. George, Marion (H. C. Eagerton), Charleston.

Subfamily JASSINÆ Am. and Serv.

Xestocephalus pulicarius Van Duzee. Clemson College, Orangeburg, Ridgeland (L. L. Ferebee).

Xestocephalus tessellatus Van Duzee. Orangeburg, Walterboro (G. M. Anderson).

Spangbergiella vulnerata Uhler. Orangeburg, St. George.

Parabolocratus flavidus Signoret. Clemson College, Orangeburg, Denmark, St. George, Isle of Palms.

Platymetopius cuprescens Osborn. Orangeburg.

Platymetopius acutus Say. Clemson College, Orangeburg, Ridgeland (L. L. Ferebee).

Platymetopius slossoni Van Duzee. Orangeburg.

Platymetopius cinereus Osborn and Ball. Orangeburg.

Platymetopius angustatus Osborn. Orangeburg, Denmark.

Platymetopius parvus n. sp. (Fig. 2). Quite similar in form to *P. angustatus* Van D., but more heavily inscribed with fuscous above, and marked with fuscous below.

Vertex moderately acute in the female, shorter in the male and nearly right angled. Pronotum broad and short, posterior margin broadly, shallowly emarginate. Elytra broadly rounded on the apex.

Coloration: the vertex a dull testaceous, with the markings in the form of irregular, pale, longitudinal vittæ. Face pale yellow, moderately infuscated on the outer portions of the genæ and the base of the front. A pale angulate line on the base of the front, continued behind the eyes. Pronotum tinged with yellow on the anterior border, the disc mottled with fuscous and marked with five, rather obscure, pale vittæ. Scutellum dull testaceous, tinged with orange near the outer angles. Elytra closely inscribed with fuscous, which is intensified on the apical region. The pale areola spots distinct. A number of deep fuscous recurved veins on the costal area. Below, fuscous, marked with pale yellow and white. Legs pale, spotted with black.

Genitalia: ♂ valve large, shield-shaped, fuscous on the base, the tip pale. Plates rather long, triangular, the outer margins set with short spines. ♀ ultimate ventral segment tapering from the base, slightly produced and feebly notched on the middle, the outer angles rounding.

Length: ♂ 3.5 mm., ♀ 4 mm.

Described from seven males and two females from Orangeburg, Denmark, Marion (H. C. Egerton), Walterboro (G. M. Anderson), Ridgeland (L. L. Ferebee), and Isle of Palms.

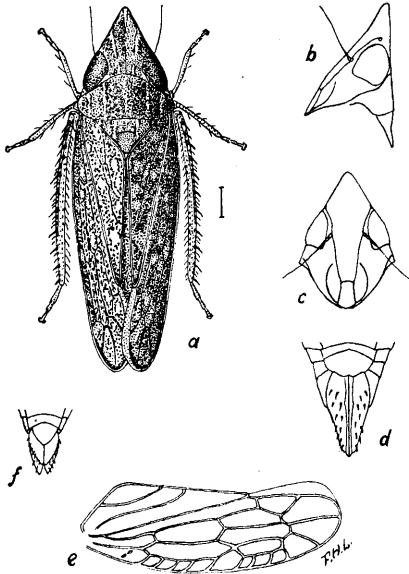


Fig. 2. *PLATYMETOPIUS PARVUS* n. sp.
a, Dorsal view of female; b, Lateral view of head; c, Face; d, Female genitalia; e, Elytron; f, Male genitalia.

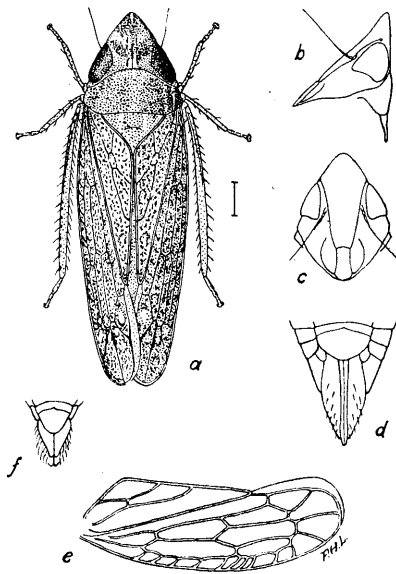


Fig. 3. *PLATYMETOPIUS CAROLINUS* n. sp.
a, Dorsal view of female; b, Lateral view of head; c, Face; d, Female genitalia; e, Elytron; f, Male genitalia.

Platymetopius frontalis Van Duzee. Orangeburg, Denmark, Marion (H. C. Egerton), Walterboro (G. M. Anderson), St. George, Charleston.

Platymetopius carolinus n. sp. (Fig. 3). Resembling *P. acutus* Say in form, but somewhat smaller and with a much shorter vertex.

Vertex short and little more acute than a right angle, sides somewhat convex. Posterior margin of the head strongly emarginate. Posterior margin of the pronotum truncate, humeral angles distinct. Elytra broadly rounding on the apex; the appendix rather narrow.

Coloration: vertex dull testaceous with an interrupted, transverse vitta midway between the eyes and the apex. A narrow longitudinal

dash on the apex, and sometimes a pair of median longitudinal vittæ extending from the base to the transverse vitta, pale. Anterior margin of the head pale. Face testaceous, approaching fulvous, with minute pale mottlings; a pale angulate line on the base of the front and continuing behind the eyes. Pronotum testaceous, the longitudinal vittæ and mottlings obscure. Scutellum testaceous, four points on the anterior margin and the angles of the apical field, pale. Elytra washed with testaceous, and moderately inscribed with fuscous points, the pale areola spots rather small but fairly distinct. Venation fuscous, intensified on the apex and the recurved nervures along the costal margin. Below, testaceous marked with fuscous and white in the female, darker in the male. Legs pale, marked with fuscous points.

Genitalia: ♂ valve rather small, apex bluntly rounded; plates long and narrow, margins set with a few bristles; pygofer about equalling the plates in length. ♀ ultimate ventral segment tapering from the base, the posterior margin broadly, roundly produced.

Length: ♂ 4 mm., ♀ 4.5-4.75 mm.

Described from two males and two females collected at Walterboro by Mr. Anderson and one female collected at Orangeburg by the writer.

Platymetopius pyrops Crumb. Orangeburg, Denmark.

Deltocephalus reflexus Osborn and Ball. Orangeburg, Marion (H. C. Eagerton), Ridgeland (L. L. Ferebee), Isle of Palms.

Deltocephalus weedi Van Duzee. Clemson College, Orangeburg, Denmark, Ferguson, Eutawville, St. George, Walterboro (G. M. Anderson), Isle of Palms.

Deltocephalus compactus Osborn and Ball. Clemson College.

Deltocephalus obtectus Osborn and Ball. Orangeburg, Ridgeland (L. L. Ferebee).

Deltocephalus apicatus Osborn. Orangeburg.

Deltocephalus flavocostatus Stal. Clemson College, Orangeburg, Ferguson, St. George, Walterboro (G. M. Anderson), Charleston.

Thamnotettix morsei Osborn. Orangeburg.

Thamnotettix shermani Ball. Orangeburg.

Thamnotettix nigrifrons Forbes. Clemson College, Orangeburg, Eutawville, Ferguson, St. George, Walterboro (G. M. Anderson), Charleston, Isle of Palms.

Thamnotettix colonus Uhler. Clemson College, Orangeburg, Denmark, Ferguson, St. George, Isle of Palms.

Scaphoideus auronitens Provancher. Orangeburg.

Scaphoideus scalaris Van Duzee. Orangeburg, Ferguson.

Scaphoideus productus Osborn. Orangeburg.

- Scaphoideus immistus** Say. Orangeburg.
- Euscelis exitiosus** Uhler. Clemson College, Sievern, Orangeburg, Denmark, Eutawville, Ferguson, St. George, Marion (H. C. Eagerton), Walterboro (G. M. Anderson), Ridgeland (L. L. Ferebee), Charleston.
- Euscelis anthracinus** Van Duzee. Clemson College.
- Euscelis bicolor** Van Duzee. Clemson College, Orangeburg, Ferguson, St. George, Marion (H. C. Eagerton), Walterboro, (G. M. Anderson), Charleston.
- Euscelis obtutus** Van Duzee. Clemson College, Orangeburg, St. George, Walterboro (G. M. Anderson), Ridgeland (L. L. Ferebee).
- Driotura robusta** Osborn and Ball. Clemson College.
- Driotura gammaroidea** Van Duzee. Clemson College (H. C. Eagerton).
- Chlorotettix necopina** Van Duzee. Clemson College.
- Chlorotettix galbanata** Van Duzee. Orangeburg, Eutaw Springs, St. George.
- Chlorotettix tunicata** Ball. Clemson College (H. C. Eagerton), Marion (H. C. Eagerton).
- Chlorotettix viridis** Van Duzee. Clemson College, Orangeburg, Denmark, Eutawville, St. George, Marion (H. C. Eagerton), Walterboro (G. M. Anderson), Charleston, Isle of Palms.
- Chlorotettix balli** Osborn. Orangeburg, Marion (H. C. Eagerton).
- Chlorotettix tergata** Fitch. Orangeburg.
- Chlorotettix rugicollis** Ball. Isle of Palms.
- Chlorotettix spatulata** Osborn and Ball. Marion (H. C. Eagerton).
- Eutettix strobi** Fitch. Orangeburg, Walterboro (G. M. Anderson).
- Eutettix seminuda** Say. Orangeburg, Denmark.
- Eutettix cincta** Osborn and Ball. Orangeburg.
- Phlepsius cinereus** Van Duzee. Orangeburg, Charleston.
- Phlepsius fuscipennis** Van Duzee. Charleston.
- Phlepsius costumaculatus** Van Duzee. Orangeburg, St. George, Ridgeland (L. L. Ferebee).
- Phlepsius irroratus** Say. Clemson College, Orangeburg, Eutawville, Ferguson, St. George, Marion (H. C. Eagerton).

Phlepsius torridus n. sp. (Fig. 4). In form resembling *P. irroratus*.

Vertex one-half longer on the middle than against the eyes, obtuse, nearly right angled, moderately impressed on the disc, anterior edge bluntly angulate. Margins of the front below the antennæ, nearly straight; clypeus broadened apically; outer angles of the genæ prominent, broadly rounded. Pronotum strongly rounded in front, hind margin broadly sinuate. Elytra rather narrow.

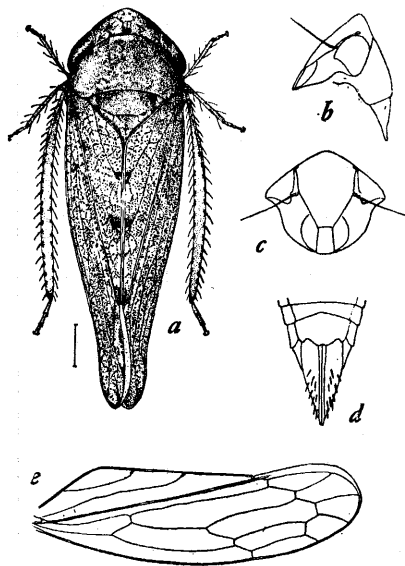


Fig. 4. *PHLEPSIUS TORRIDUS* n. sp.

a, Dorsal view of female; b, Lateral view of head; c, Face; d, Female genitalia, e, Elytron.

Coloration: vertex pale yellow, mottled with fuscous; front and genæ fuscous, a few indistinct arcs and numerous fine irrorations, pale yellow; loræ and clypeus lighter. Pronotum pale yellow on the anterior margin, sordid whitish behind, the entire surface mottled with fuscous. Scutellum fuscous, coarsely marked with pale. Elytra whitish, rather evenly inscribed with fuscous; venation fulvous, varying to fuscous on the apical region. Below dark fuscous, marked with deep testaceous. Legs deep testaceous with black and fuscous markings.

Genitalia: ultimate ventral segment with a large, almost semi-circular, shiny black lobe on the middle of the posterior margin, the apex of which bears a small, but distinct, triangular notch, lateral angles prominent.

Length, 6 mm.

Described from one female collected at Oranegburg.

Phlepsius carolinus n. sp. (Fig. 5). Quite similar to *P. franconiana* Ball in form.

Vertex little longer on the middle than against the eyes, obtusely angled, moderately impressed across the disc, anterior edge distinct. Face broad and short; front rather broad, strongly narrowed to the clypeus; margins below the antennæ nearly straight; clypeus broadened apically; the outer angles of the genæ rounded. Pronotum broadly rounded in front, posterior margin rather strongly sinuate.

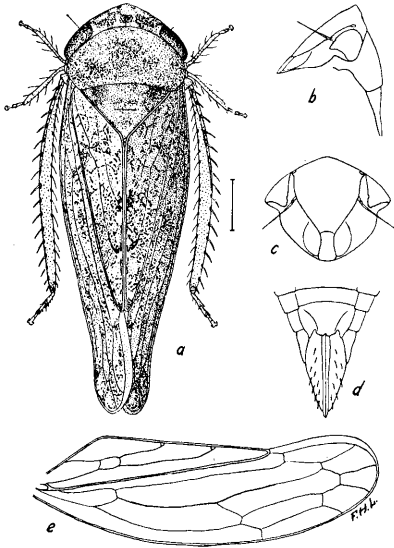


Fig. 5. *PHLEPSIUS CAROLINUS* n. sp.

a, Dorsal view of female; b, Lateral view of head; c, Face; d Female genitalia; e, Elytron.

Coloration: vertex pale yellow, mottled with fuscous; front fuscous with numerous irrorations and a few arcs, pale. The rest of the face pale yellow, mottled with fuscous. Pronotum pale yellow before, sordid whitish on the posterior margin, the whole coarsely mottled with fuscous. Elytra whitish, the pigmentation forming three very faintly indicated oblique bands. Below, pale yellowish; legs pale testaceous, marked with black.

Genitalia: ultimate ventral segment narrowed posteriorly; a median and two oblique, lateral carinæ on the disc; a broadly rounded lobe on the middle of the posterior margin, notched on the apex; lateral angles exceeding the median lobe.

Length, 7 mm.

Described from one female from Orangeburg.

Phlepsius similis n. sp. (Fig. 6). Resembling *P. collitus* Ball in form.

Vertex distinctly, though obtusely angled. Face broad, weakly impressed across the base; front strongly narrowed to the clypeus; clypeus distinctly broadened apically; outer angles of the genæ broadly rounded. Anterior margin of the pronotum strongly rounded, the posterior margin broadly emarginate.

Coloration: vertex pale yellow, irrorate with coalescing fuscous points. Face pale yellow, closely irrorate with fuscous; a few obsolete arcs on the front, the apex of the front, the disc of the loræ, and the middle

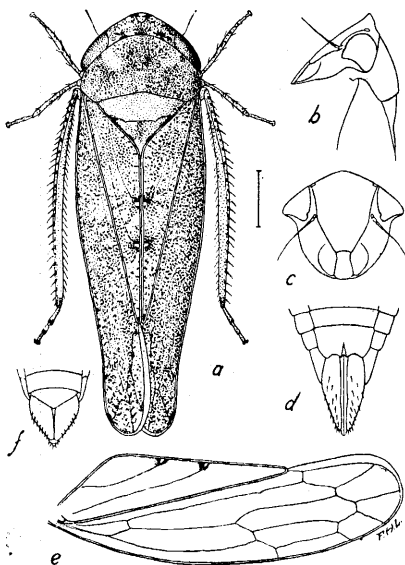


Fig. 6. *PHLEPSIUS SIMILIS* n. sp.

a, Dorsal view of female; b, Lateral view of head; c, Face; d, Female genitalia; e, Elytron; f, Male genitalia.

of the clypeus, immaculate. Pronotum pale yellow on the anterior portion, darker on the disc and posterior portion, the whole strongly irrorate with fuscous. Scutellum pale yellow, obsoletely mottled with fuscous, four dark spots on the hind margin. Elytra whitish; the venation and numerous irrorations fuscous. The claval veins ending in white points surrounded by fuscous. Below, pale, marked with fuscous and black.

Genitalia: ♂ valve obtusely triangular; plates broadly triangular, tips rather blunt, a row of short spines on the lateral submargins. ♀ ultimate ventral segment about twice as long as the penultimate, the posterior margin rather strongly sinuate on each side of a minute median notch, lateral angles prominent.

Length: ♂ 7 mm., ♀ 7.75 mm.

Described from one male and one female from Clemson College, and two females from Orangeburg.

Phlepsius collitus Ball. Orangeburg, Eutaw Springs, St. George.

Phlepsius franconianus Ball. Ridgeland (L. L. Ferebee).

Phlepsius excultus Uhler. Orangeburg, Denmark, St. George, Marion (H. C. Eagerton), Walterboro (G. M. Anderson), Ridgeland (L. L. Ferebee), Isle of Palms.

Phlepsius superbus Van Duzee. Clemson College (H. C. Eagerton).

Phlepsius decorus Osborn and Ball. Orangeburg.

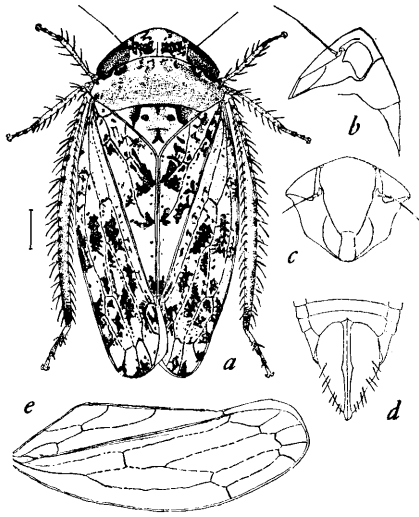


Fig. 7. *PHLEPSIUS DISTINCTUS* n. sp.

a, Dorsal view of female; b, Lateral view of head; c, Face; d, Female genitalia; e. Elytron.

Phlepsius distinctus n. sp. (Fig. 7). Similar to *P. ovatus* in form, but the strongly contrasting black and white coloration easily distinguishes this from other species of the genus.

Vertex twice as wide as long, roundly angled, sloping, feebly impressed on the disc, anterior edge obtuse; genæ broadly sinuate below the eyes, outer angles about on line with the apex of the front. Pronotum two and one-half times as wide as long; posterior margin broadly sinuate, nearly parallel to the anterior margin; the surface rugulose and minutely punctate except on the anterior portion. Scutellum obscurely rugulose on the apex. Elytra rather broad, venation distinct.

Coloration: ivory white, strongly contrasting with the fuscous markings. A broken transverse band on the disc of the vertex, and irregular markings on each side of the apex, fuscous; the median suture margined by pale yellow which extends as a faint line to the apex. The

facial sutures, the antennal sockets, and irrorations on the front, clypeus, and loræ, fuscous. Pronotum ivory white, marked with fulvous and fuscous on the anterior portion, sordid white and obscurely marked behind. Scutellum with two large areas within the basal angles, the anterior margin, two spots on the disc, and an inverted "Y" on the apex, fuscous. Elytra ivory white, opaque, with irregular subhyaline areas, the venation and large irregular splotches at the tips of the claval veins and on the anteapical, discal, and costal cells, dark fuscous or black. Ventral portion of the abdomen, fuscous, irrorate with fulvous, the lateral margins of each segment, and the lateral angles of the ultimate segment, ivory white.

Genitalia: ultimate ventral segment, short and broad, the posterior margin roundly emarginate, about half the depth of the segment, a median notch in the bottom of the emargination; lateral angles prominent, rounded.

Length: 5 mm.

Described from one female sent from Ridgeland by Mr. Ferebee.

Phlepsius majestus Osborn and Ball. Orangeburg.

Acinopterus acuminatus Van Duzee. Clemson College, Orangeburg, Walterboro (G. M. Anderson), Ridgeland (L. L. Ferebee).

Neocœlidia tumidifrons Gillette and Baker. Charleston.

Paracœlidia tuberculata Baker. Marion (H. C. Eagerton).

Jassus olitorius Say. Orangeburg.

Jassus melanotus Spangberg. Walterboro (G. M. Anderson).

Cicadula 6-notata Fallen. Clemson College, Marion (H. C. Eagerton), Ridgeland (L. L. Ferebee).

Cicadula variata Fallen. Clemson College, Orangeburg.

Eugnathodus abdominalis Van Duzee. Clemson College, Orangeburg, Ridgeland (L. L. Ferebee).

Alebra albostriella Fallen. Clemson College.

Dicraneura abnormis Walsh. Clemson College (G. G. Ainslie), Orangeburg, Charleston.

Dicraneura fieberi Low. Clemson College (G. G. Ainslie).

Empoasca unica Provancher. Orangeburg.

Empoasca obtusa Walsh. Clemson College, Orangeburg, Eutaw Springs.

Empoasca mali LeBaron. Clemson College.

Empoasca flavescens Fabricius. Clemson College, Orangeburg, Denmark, Eutawville, Marion (H. C. Eagerton), Charleston, Isle of Palms.

Empoa rosæ Linnæus. Orangeburg.

Erythroneura trifasciata Say. Clemson College, Orangeburg.

Erythroneura tricincta Fitch. Clemson College, Orangeburg, St. George.

Erythroneura comes Say. Clemson College, Orangeburg, Denmark, St. George, Charleston. Variety **rubra** Gillette. St. George. Variety **ziczac** Walsh. Clemson College. Variety **octonotata** Walsh. Orangeburg, Denmark. Variety **infus-cata** Gillette. Clemson College, Ridgeland (L. L. Ferebee).

Erythroneura illinoiensis Gillette. Orangeburg, Denmark.

Erythroneura obliqua Say. Clemson College, Orangeburg.